



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/626,250      | 07/23/2003  | Sandra Graves        | 108643-132821       | 1016             |

25943 7590 10/05/2005

SCHWABE, WILLIAMSON & WYATT, P.C.  
PACWEST CENTER, SUITE 1900  
1211 SW FIFTH AVENUE  
PORTLAND, OR 97204

EXAMINER

CHARLES, MARCUS

ART UNIT PAPER NUMBER

3682

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

*Mc*

## Office Action Summary

Application No.

10/626,250

Applicant(s)

GRAVES, SANDRA

Examiner

Marcus Charles

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 15 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11-24-03, 3-01-04, 01-28-05</u> | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This is the first action relating to application serial number 10/626,250. Claims 1-20 are currently pending.

#### ***Drawings***

1. The examiner has accepted the drawing filed with this application as formal drawing.

#### ***Election/Restrictions***

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 15-16, drawn to a cutting chain, classified in class 83, subclass 830.
  - II. Claims 1-14 and 17-20, drawn to a sprocket/guide bar with the sprocket, classified in class 474, subclass 474/158.

The inventions are distinct, each from the other because of the following reasons:

3. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the sprocket as claim does not need the cutting a chain with a drive link having a relieve section. . The subcombination has separate utility such as a sprocket for driving a silent chain having tooth section.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
5. During a telephone conversation with Christopher J. Lewis on 9/26/2005 a provisional election was made to elect without traverse to prosecute the invention of the sprocket/guide bar subjected to claims 1-14 and 17-20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 15-16 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

#### ***Specification***

The disclosure is objected to because of the following informalities: the specification does not include the reference numeral (66) and no there description as to what the reference numeral represents.

In pages 5, line 27 and 6, line 7 it is not clear as to what 22's and 28's indicate.

In page 8, line 18, it is not clear as to what "v" after gullet represents.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claims 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. In claims 11 and 12, it is not clear as to radius is a considered a conventional radius.

In claim 20, it is not clear as to what "bottom of the v" is referring to. In addition, it is not clear as to what shape is considered a bowl shape, since a bowl has different shapes.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-2 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehlen et al. (3,878,607) in view of Bell et al. (5,136,783). Ehlen discloses a nose sprocket for a chain saw, the sprocket comprising an inner race (36), an outer race (70) and a plurality of bearings (42) in the opening between the outer and inner peripheries of the inner and outer races; a gullet (62) defined between the leading edge of each plurality of teeth and the trailing edge of each adjacent plurality of teeth (60). Ehlen et al. do not disclose the chain that contacts the lower portion of the sprocket teeth. Bell et al. disclose a chain saw comprising a chain having a tang (42) that contacts the lower portion of the plurality of teeth in order to better withstand the harsh conditions imposed by cutting application. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to install the chain of Bell et al. on the sprocket

system of Ehlen et al. in order to better withstand the harsh conditions imposed by cutting application.

In claims 2 and 7, Ehlen et al. disclose the claimed invention. Note the relief section of Ethlen et al. has a greater angle that the lower section.

In clam 6, Ehlen et al. discloses the claimed invention above, including a bar (18) having opposed walls (64, 66) along the perimeter, a groove along the perimeter, a nose end having a sprocket (32).

In claims 4-5 and 9-10, note the tang is supported at the lower portion.

In claims 11 and 12-14, Ehlen et al and Bell et al. disclose the claimed invention above. Note bell discloses the radius is design and dimensioned so that the tang is allowed to be engaged in the gullet the lower portion of the sprocket.

In claim 17-20, Ehlen et al and Bell discloses the claimed invention above.

10. Claims 6, 18-120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehlen et al. in view of Bell et al. (5,136,783). as applied to claim 17 above, and further in view of Fischer (4,754,549). In claim 18, Ehlen et al and Bell discloses the claimed invention above, except for the upper portion of the drive tang edges is inwardly relieved from the sprocket tooth leading and trailing edges. Fischer et al. A drive chain for a chain saw such that the drive tang (13) of the tooth of the saw, comprising a relieve at the upper part (26A, 25) portion of the tang in order to allow the tang to be properly seated in the gullet so as to reduce or eliminate kickback. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to further

modify the tang of Ehlen to include the relieve section in view of Fischer in order to allow the tang to be properly seated in the gullet so as to reduce or eliminate kickback.

In claim 6 and 19, Ehlen et al and Bell discloses the claimed invention above, except for the leading and trailing edges of the sprocket teeth is inwardly relieved from the drive tang. Fischer et al. discloses a nose sprocket (see figs. 11-12) for a chain that includes a relieve section of the leading and trailing edges away from the upper edges of the drive tang, comprising a relieve portion (27, 28) at the leading and trailing edges of the teeth of the sprocket in order to allow the tang to be properly seated in the gullet so as to reduce or eliminate kickback. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the tang of Ehlen to include the relieve portion at the leading and trailing edges of the teeth of the sprocket in view of Fischer in order to allow the tang to be properly seated in the gullet so as to reduce or eliminate kickback.

In claim 20, note the gullet has an increased v-section.


### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cooper (3,261,385), Nitschmann (5,257,568) discloses a cutting chain link with a relieved at the upper portion. Carlton (4,901,613), Robinson (3,329,183), Lemery (3,745,870), Buchholtz et al. (6,308,606) disclose a chain saw with cutting links and tangs.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Marcus Charles  
Primary Examiner  
Art Unit 3682  
October 01, 2005